

IN THE CLAIMS

Please cancel claims 1-3 and 5-6 without prejudice to, or disclaimer of, the subject matter recited therein.

Please amend the following claim:

B1  
4. (Twice Amended) The method according to any one of claims 9 or 10, wherein said plurality of parallel band cords traverse the cylindrical drum along the axis of the drum, and the traversing speed is continuously changed, while rotating the drum at a constant speed, whereby the average density is gradually increased.

Please add the following claims:

B2  
7. A method of making a pneumatic tire,  
said pneumatic tire comprising  
a tread portion,  
a pair of sidewall portions,  
a pair of bead portions,  
a carcass extending between the bead portions, and  
a belt disposed radially outside the carcass in the tread portion, said belt composed of a breaker and a band disposed on the radially outside of the breaker,

said method comprising

$\beta^2$  applying a raw breaker material to the cylindrical drum, and spirally winding a plurality of parallel band cords around the raw breaker material on the cylindrical drum so that angles of the windings are not more than 5 degrees with respect to the tire equator, and

the improvement comprising

increasing an average tension of the band cords in the tire axial direction, during winding the band cords, from the tire equator towards each axial edge of the band to satisfy the following relationships

$$T_n = T_c \times (R_c/R_n)$$

and

$$T_c \times (R_c/R_e) < T_e \leq 3.0 \times T_c \times (R_c/R_e)$$

wherein

$T_n$  is the average tension at any position  $P_n$  at a certain distance from the tire equator,

$T_c$  and  $T_e$  are the average tensions at the tire equator and the band edges, respectively,

$R_n$  is the radius of the inner surface of the band in the finished tire at the positions  $P_n$ , and

$R_c$  and  $R_e$  are the radii of the inner surface of the band at the

tire equator and the band edges, respectively.

B<sup>2</sup>  
8. A method according to claim 7, wherein  
the average tensions  $T_c$  and  $T_e$  and the radii  $R_c$  and  $R_e$  satisfy  
the following relationship:

$$1.5 \times T_c \times (R_c/R_e) < T_e \leq 3.0 \times T_c \times (R_c/R_e).$$

9. A method of making a pneumatic tire,  
said pneumatic tire comprising  
a tread portion,  
a pair of sidewall portions,  
a pair of bead portions,  
a carcass extending between the bead portions, and  
a belt disposed radially outside the carcass in the tread  
portion, said belt composed of a breaker and a band disposed on the  
radially outside of the breaker,  
said method comprising  
applying a raw breaker material to a cylindrical drum,  
spirally winding a plurality of parallel band cords around the  
raw breaker material on the cylindrical drum so that angles of the  
windings are not more than 5 degrees with respect to the tire  
equator, and

the improvement comprising

*B2* increasing an average density of the band cords in the tire axial direction during winding the band cords from the tire equator towards each axial edge of the band to satisfy the following relationships

$$D_n = D_c \times (R_c/R_n)$$

and

$$D_c \times (R_c/R_e) < D_e \leq 3.0 \times D_c \times (R_c/R_e)$$

wherein

$D_n$  is the average density at any position  $P_n$  at a certain distance from the tire equator,

$D_c$  and  $D_e$  are the average densities at the tire equator and the band edges, respectively,

$R_n$  is the radius of the inner surface of the band in the finished tire at the positions  $P_n$ , and

$R_c$  and  $R_e$  are the radii of the inner surface of the band at the tire equator and the band edges, respectively.

10. A method according to claim 9, wherein

the average densities  $D_c'$  and  $D_e'$  and the radii  $R_c$  and  $R_e$  satisfy the following relationship:

$$1.5 \times D_c \times (R_c/R_e) < D_e \leq 3.0 \times D_c \times (R_c/R_e).$$

B2

11. A method of making a pneumatic tire,  
said pneumatic tire comprising  
a tread portion,  
a pair of sidewall portions,  
a pair of bead portions,  
a carcass extending between the bead portions, and  
a belt disposed radially outside the carcass in the tread  
portion, said belt composed of a breaker and a band disposed on the  
radially outside of the breaker,  
said method comprising  
applying a raw breaker material to a cylindrical drum,  
spirally winding a plurality of parallel band cords around the  
raw breaker material on the cylindrical drum so that angles of the  
windings are not more than 5 degrees with respect to the tire  
equator, and  
gradually increasing (1) an average density of the band cords  
in the tire axial direction and (2) an average tension of the band  
cords in the tire axial direction from a center portion of the band  
towards each axial edge of the band during winding the band cords.

12. A method of making a pneumatic tire,

said pneumatic tire comprising

*B2* a tread portion,

a pair of sidewall portions,

a pair of bead portions,

a carcass extending between the bead portions, and

a belt disposed radially outside the carcass in the tread portion, said belt composed of a breaker and a band disposed on the radially outside of the breaker,

said method comprising

applying a raw breaker material to a cylindrical drum, and

spirally winding a plurality of parallel band cords around the raw breaker material on the cylindrical drum so that angles of the windings are not more than 5 degrees with respect to the tire equator,

increasing an average tension of the band cords in the tire axial direction during winding the band cords from the tire equator towards each axial edge of the band while satisfying the following condition

$$T_n = K_t \times T_c \times (R_c/R_n)$$

wherein

$T_n$  is the average tension during winding the band cords at any position  $P_n$  at a certain distance from the tire equator,

*B2*  
Tc is the average tension during winding the band cords at a position Pc at the tire equator,

Rn is the radius of the inner surface of the band in the finished tire at the position Pn,

Rc is the radius of the inner surface of the band in the finished tire at the position Pc, and

Kt is a constant more than 1 but not more than 3, and

increasing an average density of the band cords in the tire axial direction during winding the band cords from the tire equator towards each axial edge of the band to satisfy the following relationships while satisfying the following condition

$$D_n = K_d \times D_c \times (R_c/R_n)$$

wherein

Dn is the average density during winding the band cords at any position Pn at a certain distance from the tire equator,

Dc is the average density during winding the band cords at a position Pc at the tire equator, and

Kd is a constant more than 1 but not more than 3.

13. A method according to claim 12, wherein

said constant Kt is more than 2 but not more than 3, and

said constant Kd is more than 2 but not more than 3.

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Application Number 09/888,568

Attached hereto is a marked up version showing the changes made to the application by this Reply.